

IN THE CLAIMS:

Please amend claims 1, 10-11, 17, and 39, and add claim 40 as follows.

1. (Currently Amended) A method, comprising:

at least one stage to encode a frame ~~in a communication network~~ using at least one of a plurality of codec modes, wherein an encoded frame formed by each of said codec modes comprises a plurality of parameters,

wherein said at least one stage comprises:

~~preprocessing the frame to estimate~~ first, calculating values for said plurality of parameters;

second, selecting one group from a plurality of groups of said codec modes using said ~~calculated~~estimated values of said parameters, wherein each of said groups comprises at least one of said codec modes and comprises a common parameter characteristic; and

third, encoding the frame with one of the codec modes from the selected group in dependence on said common parameter characteristic.

2. (Previously Presented) A method as claimed in claim 1, comprising a plurality of said stages.

3. (Previously Presented) A method as claimed in claim 1, wherein the parameters comprise one or more of: a voice activity detection flag, a long term

prediction filtering flag parameter, an immittance spectral pair parameter, a pitch delay parameter, an algebraic codebook parameter, a gain parameter and a high-band energy parameter.

4. (Previously Presented) A method as claimed in claim 3, wherein the parameter characteristic is a bit size of the parameter.

5. (Original) A method as claimed in claim 1, wherein the frame is a speech frame.

6. (Previously Presented) A method as claimed in claim 1, wherein the selected group consists of one or more of said codec modes.

7. (Previously Presented) A method as claimed in claim 1, wherein the selecting said one codec mode group is in dependence on determined parameters determined from the encoding of the frame.

8. (Previously Presented) A method as claimed in claim 7, wherein the determined parameters are compared to threshold values.

9. (Original) A method as claimed in claim 8, wherein the one of the codec modes selected to encode the frame is dependent on the comparison of the threshold values.

10. (Currently Amended) A method as claimed in claim 8, wherein the threshold ~~thresholds~~ values are dependent on a target bit rate.

11. (Currently Amended) A method as claimed in claim 8, wherein the ~~thresholds~~ threshold values are stored in a tuning table, the tuning table comprising ~~thresholds~~ threshold values for each of the parameters corresponding to each of the plurality of codec modes.

12. (Previously Presented) A method as claimed in claim 1, wherein each of the plurality of codec modes defines a bit rate for encoding the frame.

13. (Previously Presented) A method as claimed in claim 1, wherein said at least one stage being arranged to have a group with a codec mode with a lowest bit rate and another group with remaining codec modes.

14. (Previously Presented) A method as claimed in claim 13 comprising at least two stages, wherein said first stage being arranged to have two groups and said second

stage being arranged to have at least three groups, wherein at least two of the groups of the second stage are contained in one of the groups of the first stage.

15. (Original) A method as claimed in claim 14 comprising three stages, wherein in said third stage, said frame is encoded by one of said plurality of codec modes.

16. (Original) A method as claimed in claim 1, wherein the plurality of codec modes are codec modes of an adaptive multi rate codec.

17. (Currently Amended) An apparatus, comprising
a processor configured ~~to preprocess a frame to estimate~~ calculate values for a plurality of parameters of a frame, wherein the frame is configured to be encoded ~~in a communication network~~ using at least one of a plurality of codec modes, wherein an encoded frame formed by each of said codec modes comprises said plurality of parameters;

selecting circuitry configured to select, after said calculation of the frame parameters, one group from a plurality of groups of said codec modes based on said calculated values of said parameters, wherein each of the groups comprises at least one of said codec modes and comprises a common parameter characteristic; and

an encoder configured to encode, after said selecting of the group of codec modes,
the frame with one of the codec modes from the selected group in dependence on said
common parameter characteristic.

18- (Cancelled)

19. (Previously Presented) An apparatus as claimed in claim 17, wherein the
parameters comprise one or more of: a voice activity detection flag, a long term
prediction an filtering flag parameter, an immitance spectral pair parameter, a pitch delay
parameter, an algebraic codebook parameter, a gain parameter and a high-band energy
parameter.

20. (Previously Presented) An apparatus as claimed in claim 19, wherein the
parameter characteristic is a bit size of the parameter.

21. (Original) An apparatus as claimed in claim 17, wherein the frame is a
speech frame.

22-38. (Cancelled)

39. (Currently Amended) An apparatus, comprising:

processing means for ~~preprocessing a frame to estimate~~ calculate values for a plurality of parameters of a frame, wherein the frame is configured to be encoded ~~in a communication network~~ using at least one of a plurality of codec modes, wherein an encoded frame formed by each of said codec modes comprises said plurality of parameters, wherein the parameters comprise one or more of a voice activity detection flag, a long term prediction filtering flag parameter, an immitance spectral pair parameter, a pitch delay parameter, an algebraic codebook parameter, a gain parameter and a high-band energy parameter;;

selecting means for receiving said on said calculated values of said parameters and selecting from a plurality of groups of codec modes one group based on said calculated values of said parameters, wherein each of said groups comprises at least one of said codec modes and a common parameter characteristic; and

encoding means for receiving information identifying said selected group of codec modes and encoding the frame with one of the codec modes from the selected group in dependence on said common parameter characteristic.

40. . (New) A computer program embodied on a computer-readable medium configured to control a processor to perform:

at least one stage to encode a frame using at least one of a plurality of codec modes, wherein an encoded frame formed by each of said codec modes comprises a plurality of parameters,

wherein said at least one stage comprises:

first, calculating values for said plurality of parameters;

second, selecting one group from a plurality of groups of said codec modes using said calculated values of said parameters, wherein each of said groups comprises at least one of said codec modes and comprises a common parameter characteristic; and

third, encoding the frame with one of the codec modes from the selected group in dependence on said common parameter characteristic.